

THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Art Unit: 2128)
Examiner: Fred O. Ferriss, III)
Applicant(s): William Francis Weber et al.)
Serial No.: 09/385,739)
Filing Date: August 30, 1999)
For: METHOD OF PARAMETRIC DESIGN)
OF AN INSTRUMENT PANEL SUPPORT)
STRUCTURE)

REPLY BRIEF

Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

Sir:

This Reply Brief is directed to points of argument raised in the Examiner's Answer dated January 28, 2004 for the above-identified application. As to procedural matters, on page 3, the Examiner argues that the Summary of the Invention is not correct. Applicants submit that the Summary of the Invention is correct and the part of the specification recited supports the understanding of the invention. On page 4, the Examiner argues that Appellant's brief does not argue that the claims stand or fall together other than as a single group. Applicants submit that the Examiner is wrong and has misrepresented Applicants' Appeal Brief. Applicants, on page 6 of their Appeal Brief, specifically state that claims 1, 7, and 16 do not stand or fall together in regard to the rejection under 35 U.S.C. § 102(e) and that claims 1 through 6 stand do not stand or fall together with either claims 7 through 15 or claims 16 through 18 in regard to the rejection under 35 U.S.C. § 103. Applicants have provided reasons in support thereof on pages 7 through

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28 of the Appeal Brief. As such, claims 1 through 6 do not stand or fall together with either claims 7 through 15 or claims 16 through 18.

As to substantive matters, on page 11 of the Examiner's Answer, the Examiner argues that Weber clearly discloses the parametric design portions of an automobile with input parameters using three-dimensional coordinates. In addition, on page 16, the Examiner argues that Cavendish teaches techniques for computer aided design of automotive vehicle panels where input parameters using three-dimensional coordinates are used to generate a design panel based on user inputs and predetermined criteria and by applying the techniques taught by Cavendish et al, a skilled artisan would have been able to realize a parametric design of an instrument panel support structure. Further, on page 18 of the Examiner's Answer, the Examiner argues that since the intended use of the claimed invention relates to the design of instrument panels in a vehicle, it would have been obvious, and necessary, to include attachment location parameters, since the instrument panel must attach to the vehicle, and to further include vehicle body style parameters in the stored library, since the body style parameters (dimensions) effect to parameters of the instrument panel.

Applicants respectfully disagree with the Examiner as to the above arguments. As to the first argument, the Examiner argues that Weber clearly discloses the parametric design portions of an automobile with input parameters using three-dimensional coordinates. In Weber et al. '216, the method locates an occupant and instrument panel cluster in the vehicle and electronically represents them, but the method does not determine an input parameter, wherein the input parameter is a three dimensional coordinate defining the instrument panel support structure relative to the vehicle. Additionally, in Weber et al. '216, Column 4, line 53, discloses parameter selection and control, it fails to how the input parameter is determined and that the input parameter is a three dimensional coordinate defining the instrument panel support structure relative to the vehicle. The Examiner is attempting to piece together isolated bits and pieces of

Weber et al. '216 to support his argument. There is no factual basis in the reference relied upon which supports the Examiner's argument to conclude that Weber et al. '216 discloses the steps of determining an input parameter, wherein the input parameter is a three dimensional coordinate defining an instrument panel support structure relative to a vehicle and electronically generating a parametric design of the instrument panel support structure using the input parameter. Therefore, it is respectfully submitted that the Examiner has misinterpreted the Weber et al. '216 reference and the rejections under 35 U.S.C. § 102(e) are clearly wrong.

As to the second argument, the Examiner argues that that Cavendish teaches techniques for computer aided design of automotive vehicle panels where input parameters using three-dimensional coordinates are used to generate a design panel based on user inputs and predetermined criteria and by applying the techniques taught by Cavendish et al, a skilled artisan would have been able to realize a parametric design of an instrument panel support structure. Once again, there is no factual basis which supports the Examiner's argument. Cavendish et al. '309 discloses a feature based method of designing automobile panels including the steps of entering into a computer a plurality of coordinate data points, connecting the data points with straight lines and rounding the corner of the thereby defined polygon with a circle of radius to define a smooth closed curve, generating output data which defines the composite surface, and machining the workpiece in accordance with the output data. In Cavendish et al. '309, Figure 6 is an application of the method. Cavendish et al. '309 lacks determining an input parameter, wherein the input parameter is a three dimensional coordinate defining an instrument panel support structure relative to a vehicle, electronically generating a parametric design of an instrument panel support structure using the input parameter, and determining if the parametric design of the instrument panel support structure meets a predetermined criteria using a computer-aided analytical technique. As such, how could one skilled in the art realize a parametric design

of an instrument panel support structure? The Examiner's stated conclusion of obviousness is based on speculation, unfounded assumptions or hindsight reconstruction to supply deficiencies in the factual basis. The Examiner has not presented a prima facie case of obviousness. Therefore, it is respectfully submitted that the Examiner has misinterpreted the Cavendish et al. '309 reference and the rejection under 35 U.S.C. § 103 is clearly wrong.

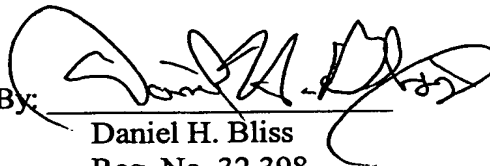
As to the third argument, the Examiner argues that since the intended use of the claimed invention relates to the design of instrument panels in a vehicle, it would have been obvious, and necessary, to include attachment location parameters, since the instrument panel must attach to the vehicle, and to further include vehicle body style parameters in the stored library, since the body style parameters (dimensions) effect to parameters of the instrument panel. Once again, there is no factual basis in the reference relied upon which supports the Examiner's argument. Saxton et al. '692 discloses methods and systems for generating parametric designs including the steps of establishing a master drawing with text and dimensions, continuously displaying the updated master drawing on a monitor, displaying on the monitor a design plan with an array of cells, inputting to the design plan a statement which includes a solicitation for information, inputting to the computer an instruction and information solicited, displaying the information inputted on the monitor so that the user can check the responses inputted to the computer, and electronically storing in the computer data representing the accomplished design. Saxton et al. '692 lacks selecting a vehicle body structure for a vehicle from a library stored in a memory of a computer system, orienting an occupant within the vehicle body, locating an instrument panel support structure relative to the vehicle body, determining an input parameter, wherein the input parameter is a three dimensional coordinate defining an instrument panel support structure relative to the vehicle body, and electronically generating a parametric design of an instrument panel support structure using the input parameter.

A rejection based on 35 U.S.C. § 103 must rest on a factual basis, with the facts being interpreted without hindsight reconstruction of the invention from the prior art. In making this evaluation, the Examiner has the initial duty of supplying the factual basis for the rejection he advances. He may not, because he doubts that the invention is patentable, resort to speculation, unfounded assumptions or hindsight reconstruction to supply deficiencies in the factual basis. See In re Warner, 379 F.2d 1011, 154 U.S.P.Q. 173 (C.C.P.A. 1967).

The Examiner, based on speculation, states that intended use of the claimed invention relates to the design of instrument panels in a vehicle, it would have been obvious, and necessary, to include attachment location parameters. In Saxton et al. '692, while a parametric design can be electronically generated, the parametric design is not of an instrument panel support structure using an input parameter of a three dimensional coordinate defining an instrument panel support structure relative to the vehicle. As such, how would one skilled in the art include attachment location parameters for an instrument panel support structure? As such, the Examiner's stated conclusion of obviousness is based on speculation and hindsight reconstruction of the claimed invention. The Examiner has not presented a prima facie case of obviousness. Therefore, it is respectfully submitted that the rejection under 35 U.S.C. § 103 is clearly wrong.

Accordingly, it is respectfully requested that the rejection of the pending claims be reversed and that the claims pending in the present application be allowed.

Respectfully submitted,

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